

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
6 October 2005 (06.10.2005)

PCT

(10) International Publication Number
WO 2005/093510 A3

(51) International Patent Classification⁷: **H04N 5/232**,
5/225

(21) International Application Number:
PCT/GB2005/001123

(22) International Filing Date: 23 March 2005 (23.03.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
0406730.2 25 March 2004 (25.03.2004) GB

(71) Applicant (for all designated States except US): **1... LIMITED** [GB/GB]; St. Johns Innovation Centre, Cowley Road, Cambridge CB4 0WS (GB).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **LENEL, Ursula,**

Ruth [GB/GB]; 52 Victoria Park, Cambridge CB4 3EL (GB). **HOOLEY, Anthony** [GB/GB]; 79 De Freville Avenue, Cambridge CB4 1HP (GB).

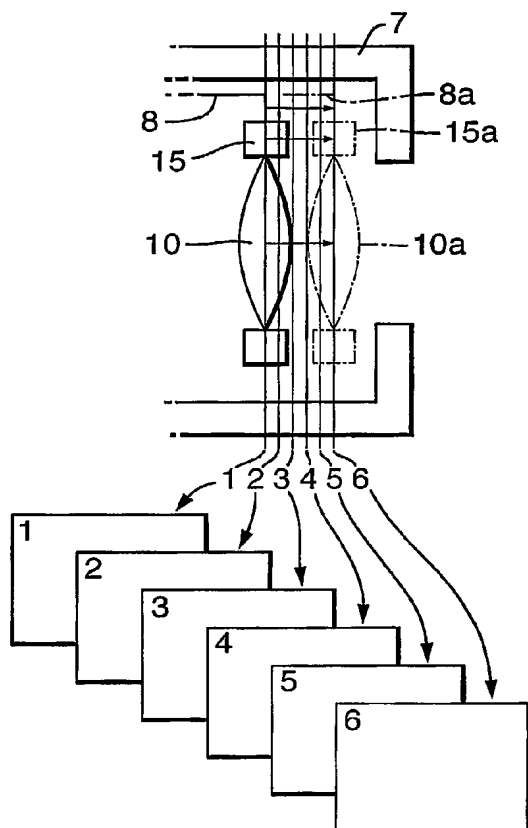
(74) Agents: **MERRYWEATHER, Colin, Henry** et al.; J.A. Kemp & Co., 14 South Square, Gray's Inn, London WC1R 5JJ (GB).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH,

[Continued on next page]

(54) Title: FOCUSING OF A DIGITAL CAMERA



(57) Abstract: A digital camera comprises an image sensor for capturing an image, a lens arrangement arranged to focus light onto the image sensor and providing a variable focus, and a memory for storing images captured by the image sensor. Focusing is achieved by a series of images having differing focus provided by the lens arrangement being captured by the image sensor and stored in the memory. Analysis of the images stored in the memory to determine the quality of the focus of the images is used to derive an in-focus image from the series of images. This avoids the complication of employing autofocus control of the lens arrangement. Movement of the lens arrangement may be driven by movement of a button operable by a user which avoids the need for an actuator for the lens arrangement.

WO 2005/093510 A3



GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

— before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

(88) Date of publication of the international search report:
24 November 2005

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.